AMENDMENTS TO THE SPECIFICATION

Please amend the paragraph beginning on line 17 of page 13 as follows:

Figure 1 shows the performance of the cell using the double perovskite oxide $La_{0.75}Sr_{0.25}Cr_{0.5}Mn_{0.5}O_3$ anode of Example 3, when supplied with various different fuels: wet H_2, wet 5%H_2 or wet and pure CH_4, at 900°C. The cell had a 0.2mm electrolyte, and data are shown for the following fuels, wet H_2; dash, wet 5%H_2; dash-dot, wet CH_4 and dash-dot-dot CH_4 at 1173K. While the open circuit voltages (OCVs) for wet 5%H_2 and wet H_2 were close to the value predicted by the Nerst equation, 0.95 and 1.09V at 900°C, the OCV for wet and unhumidified cylinder CH_4 was 0.87 and 086V respectively, which is slightly lower than that for wet 5%H_2. The maximum power densities were higher for wet H_2 than wet 5%H_2, with values of 0.34W cm^{-2} and 0.17W cm^{-2} respectively. The maximum power density for wet methane was about 0. 1W cm^{-2} at 0.53V, which is slightly lower than that for wet 5% H_2.

Please amend the paragraph beginning on line 31 of page 13 as follows:

The properties of the anode of Example 3 were examined by means of a three-electrode configuration test cell illustrated schematically in Figs. 2 and 2A, which show a disc shaped electrolyte 1 with an annular anode 2 on one face 3 and an annular cathode 4 and a central disc-form reference electrode 5 on the opposite face 6. The electrolyte was sintered 8mol% Y_2O_3 stabilized ZrO_2 (YSZ) pellet with 2mm thickness and 20mm diameter. An anode with a thickness of about 50μm was deposited onto the YSZ electrolyte using an ethanol-based slurry and firing typically at 1000 to 1300°C. Pt paste (as previously described) was painted onto the other side of YSZ as counter or cathode, and reference electrodes. The anode over-potential with

wet H_2 is shown in Fig. 3. It was found that the anode resistance decreases under polarization which is closer to the real operation conditions than OCV. The polarization resistance is less than $0.3\Omega/cm^2$ at a current density $300mA/cm^2$. With further optimization, this performance could readily be improved even more. Fig. 3 shows the potential and current change at 925°C under operation using wet CH_4 as fuel at 0.4V bias using only $La_{0.75}Sr_{0.25}Cr_{0.5}Mn_{0.5}O_3$ as the anode. No significant performance degradation was observed during four hours operation although a trace amount of carbon was observed after the fuel cell performance in wet CH_4 and cooling down in the same atmosphere.

Please amend the paragraph beginning on line 22 of page 14 as follows:

In some cells, a thin film interface of $Ce_{0.8}Gd_{0.2}O_2$ (CGO), prepared by a sol-gel process, was applied between the YSZ electrode and the anode. Anode polarisation resistance was further decreased with such a thin layer (5 μm) of CGO deposited between the YSZ electrolyte and LSCM anode as shown in Fig. 4 which illustrates a comparison of electrode impedance spectra for LSCM/CGO anodes. Spectra were measured at 925°C in 4.9%H +2.3%H O+92.8%Ar(Y) and 97%H +3%H O(O). Three electrode configuration with LSCM/CGO as working electrode and Pt as counter and reference electrodes. The polarization resistances in wet $5\%H_2$ and wet H_2 were about $0.62\Omega\ cm^{-2}$ and $0.25\Omega\ cm^{-2}$, respectively. The anode polarization in wet H_2 at 925°C is comparable to that of the conventional Ni-YSZ cermet anode at 1000°C.